

4th Asia-Pacific Abstracts

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of vertebral fractures and death among Australian patients with corticosteroid-induced osteoporosis. Age-specific underlying incidences of vertebral fractures and death were estimated from published data. The costs (AUD \$1393 in Year 1 and AUD \$34 in subsequent years) and utility (0.71) associated with a vertebral fracture were also drawn from published sources, as was the efficacy of risedronate in reducing vertebral fracture risk (relative risk 0.43, 95% CI 0.20–0.92). The model adopted a life-time horizon and an annual discount rate of 5% was applied to both costs and years of life/QALYs lived. Multiple sensitivity analyses were undertaken with reasonable variations to key data inputs. **RESULTS:** The base-case incremental cost-effectiveness ratio (ICER) with a life-time horizon was AUD \$18,085 per QALY saved. Estimated ICERs remained below AUD \$40,000 per QALY saved throughout all sensitivity analyses, except when assuming the upper limit of the 95% confidence interval for risedronate's efficacy in reducing vertebral fracture risk (AUD \$53,130 per QALY saved). **CONCLUSIONS:** Risedronate represents a cost-effective option for preventing vertebral fractures in Australian patients with corticosteroid-induced osteoporosis. This was confirmed by the recent recommendation by the Australian Pharmaceutical Benefits Advisory Committee (PBAC) that risedronate be reimbursed for this indication.

MUSCULAR-SKELETAL DISORDERS – Patient-Reported Outcomes Studies

PMS9

HEALTH-RELATED QUALITY OF LIFE IN INDIAN PATIENTS WITH RHEUMATOID ARTHRITIS

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OBJECTIVES: Rheumatoid arthritis (RA) is a multisystem disease with various extra-articular manifestations (EAMs). Health-related quality of life (HRQOL) issues are assuming increasing importance in chronic rheumatic diseases like RA. Very less data on QOL in RA is available from the Indian subcontinent. There is also a paucity of literature on the impact of EAMs on HRQOL in RA. The objective of this study was to address these lacunae. **METHODS:** The study group comprised 166 patients with RA from a rheumatology clinic in India. Quality of life was estimated by the generic HRQOL measure: World Health Organization quality of life instrument (WHOQOL-Bref). Disease activity in RA was measured by calculating Disease Activity Score-28 (DAS28) and functional disability by the Health Assessment Questionnaire (HAQ). Extra-articular manifestations (EAMs) were diagnosed clinically. **RESULTS:** The mean duration of rheumatoid arthritis (RA) was 10 ± 3.1 years. The mean DAS28 and HAQ were 4.21 ± 1.1 and 1.01 ± 1.2 , respectively. At least one EAM was present in 46 patients. The mean HRQOL scores of the patients were 11.5 ± 2.1 , 12.2 ± 2.5 , 13.4 ± 2.6 , and 12.3 ± 2.4 in the physical, psychological, social, and environmental domains of the WHOQOL-Bref respectively. Age, gender, disease duration, educational status, constitutional symptoms, rheumatoid factor positivity, erosions and deformities did not influence HRQOL. Disease activity had a negative influence on the physical and psychological domains. Patients with EAMs had significantly higher DAS28 scores compared to patients without EAMs. Even after adjustment for disease activity, patients with EAMs had lower HRQOL scores than patients without these features (statistically significant for physical domain). **CONCLUSIONS:** The physical domain of HRQOL is most affected in Indian patients with RA. Increasing disease activity and presence of EAMs worsens the quality of life.

MUSCULAR-SKELETAL DISORDERS – Health Care Use & Policy Studies

PMS10

HEALTH-CARE UTILIZATION OF NEW PATIENTS WITH LOW BACK PAIN IN SOUTH KOREA

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OBJECTIVES: The purpose of this study was to describe the pattern of health-care utilization among new patients with low back pain. **METHODS:** This study is based on the Korean National Health Insurance (NHI) claim data. Study subjects included those who 1) were newly diagnosed as low back pain; 2) received at least one lumbosacral spine simple x-ray; and 3) were not using medical service as a patient with low back pain for past 2 years before the first visit (index date). The follow-up period was 1 year from the index date. **RESULTS:** New patients with low back pain used the clinic (81.8%) most and orthopedics (62.2%) was the most visited department in 2006. Ninety-six percent of new patients used outpatient service and 5.9% used inpatient service. The medical cost (paid by insurers) per patient was \$215.1. Male expenses more than female, and the cost increased as the age of patients increased. Average days including medication days and days of visit per new patient with low back pain was 6.7 days with the tendency that female's average days including medication days and days of visit were more than those of male's. In terms of outpatient service, average days including medication days and days of visit per new patients was 5.8 days and in inpatient service, it was 15.8 days. **CONCLUSIONS:** Efforts to identify the factors which may produce low back pain and to reduce the incidence is on need. Also, analysis on the factors influential over the health-care use of new patients with low back pain needs to be conducted in future studies.

PMS11

HEALTH-CARE UTILIZATION OF PATIENTS WITH LOW BACK PAIN IN SOUTH KOREA (2006–2008)

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OBJECTIVES: The objectives of this study were 1) to identify the pattern of health-care use; and 2) to estimate the pattern change of health-care use for low back pain in each year of 2006, 2007, and 2008. **METHODS:** This study is based on the Korean National Health Insurance (NHI) claim data. Study subjects included those who 1) used medical service as a patient with low back pain from January 1 to December 31, and 2) received at least one lumbosacral spine simple x-ray each year. The identified number of the patients was 1,981,427 in 2006, 2,069,995 in 2007, and 2,119,408 in 2008. **RESULTS:** Patients with low back pain used the clinic most and orthopedics was the most visited department in each year of 2006, 2007, and 2008. The rate of outpatient service use declined and that of inpatient service use increased in compared 3 years. The medical cost (paid by insurers) showed increasing trend estimated as \$569 million in 2006, \$626 million in 2007, and \$654 million in 2008. However, if the inflation rate of consumer price was considered (2.4% going up between 2006 and 2007, and 7.3% between 2006 and 2008), the cost in 2007 was estimated as \$611 million still showing increase, but, in 2008, \$610 million was estimated showing decrease. Medical cost per patient was \$287.2 in 2006, \$295.2 in 2007, and \$287.8 in 2008. Average days including medication days and days of visit per patient was 9.4 days in 2006, 9.1 days in 2007, and 8.8 days in 2008 as declining. **CONCLUSIONS:** Efforts are needed to reduce prevalence and incidence of low back pain. And analysis on factors influential on the medical use of the patients needs to be conducted in future studies.

PMS12

INCREASE OF INJECTION THERAPY ON PATIENTS WITH LOW BACK PAIN IN SOUTH KOREA (2006–2008)

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OBJECTIVES: The purposes of this study were 1) to analyze the pattern of injection therapy use for low back pain, and 2) to estimate the health-care use of low back pain patient who received injection therapy in 2006, 2007, and 2008. **METHODS:** This study is based on the Korean National Health Insurance (NHI) claim data. Study subjects included those who 1) used medical service as a patients with low back pain from January 1 to December 31; 2) received at least one lumbosacral spine simple x-ray; and 3) took more than one injection therapy each year. **RESULTS:** The percent of patients with low back pain who received injection therapy was increasing as followed: 10.8% in 2006 (213,796 among total 1,981,427 patients with low back pain), 11.0% in 2007 (227,432 among 2,069,995), and 11.5% (244,640 among 2,119,408). Number of patients with low back pain treated with injections per 100,000 general population was 436 in 2006, 462 in 2007, and 494 in 2008. Number of patients with low back pain treated with injections per 100,000 low back pain patients was 10,790 in 2006, 10,987 in 2007, and 11,543 in 2008. The rate of patients who received one injection in a year was 58.9% in 2006, 52.5% in 2007, and 48.1% in 2008 showing tendency of decrease, while more than two injections was increasing. The most conducted procedure was Epidural Nerve Blocks consistently for 3 years. The most department visited for service was anesthesiology in 2006 and orthopedics in 2007 and 2008. **CONCLUSIONS:** The injection therapy on patients with low back pain is increasing. But the efficacy of it has not reached to consensus so far, which means more careful conducting is needed. Also, the efficacy of injection therapy specifically in South Korea should be investigated in future studies.

PMS14

FACTORS INFLUENCED ORAL OXICAM AND COXIBS' EXPENDITURE AT A THAI TEACHING HOSPITAL, FISCAL YEAR 2006–2009Kaojarern S¹, Masaya-anon N¹, Pongcharoensuk P², Pattanaprateep O¹¹Ramathibodi Hospital, Mahidol University, Bangkok, Thailand; ²Mahidol University, Bangkok, Thailand

OBJECTIVES: Oral Oxicam and Coxibs' expenditure at a Thai teaching hospital was rapidly increased in recent years. We examined price and quantity factors that influenced the rising expenditure by deterministic model. **METHODS:** This study was a retrospective database analysis at a Thai teaching hospital in Bangkok. Prescription utilization data of one oral Oxicam and two Coxibs (Meloxicam, Celecoxib, and Etoricoxib) during fiscal year 2006 to 2009 were retrieved. In the model, changes in annual expenditure were attributed to two factors: cost per patient per year (P) and number of patients per year (Q). By measuring quantity as Defined Daily Dose (DDD), changes in cost per patient (P) comprised of two parts: cost per DDD (p) and DDD per patient (q). **RESULTS:** Overall expenditure of the three drugs was risen from 49.9 million Baht in 2006 to 64.9 million Baht in 2009 (adjusted for inflation). Thirty percent of total increase in expenditure was mainly the result of switching from Meloxicam (percent change, –44%) to Etoricoxib (119%). When decomposed into price and quantity factors, quantity had more effect than price, especially number of patients who moved from Meloxicam (percent change of Q, –35%) to Etoricoxib (112%) and Celecoxib (8%). DDD per patient for Celecoxib was a little increase (percent change of q, 4%), slightly decreased for Etoricoxib (–4%), and much lower for Meloxicam (–32%). Percent change in price of the three drugs was slightly positive (28%, 7%, and 8% for Meloxicam, Celecoxib, and Etoricoxib, respectively). **CONCLUSIONS:** The major increase of drug expenditure from 2006 to 2009 was from